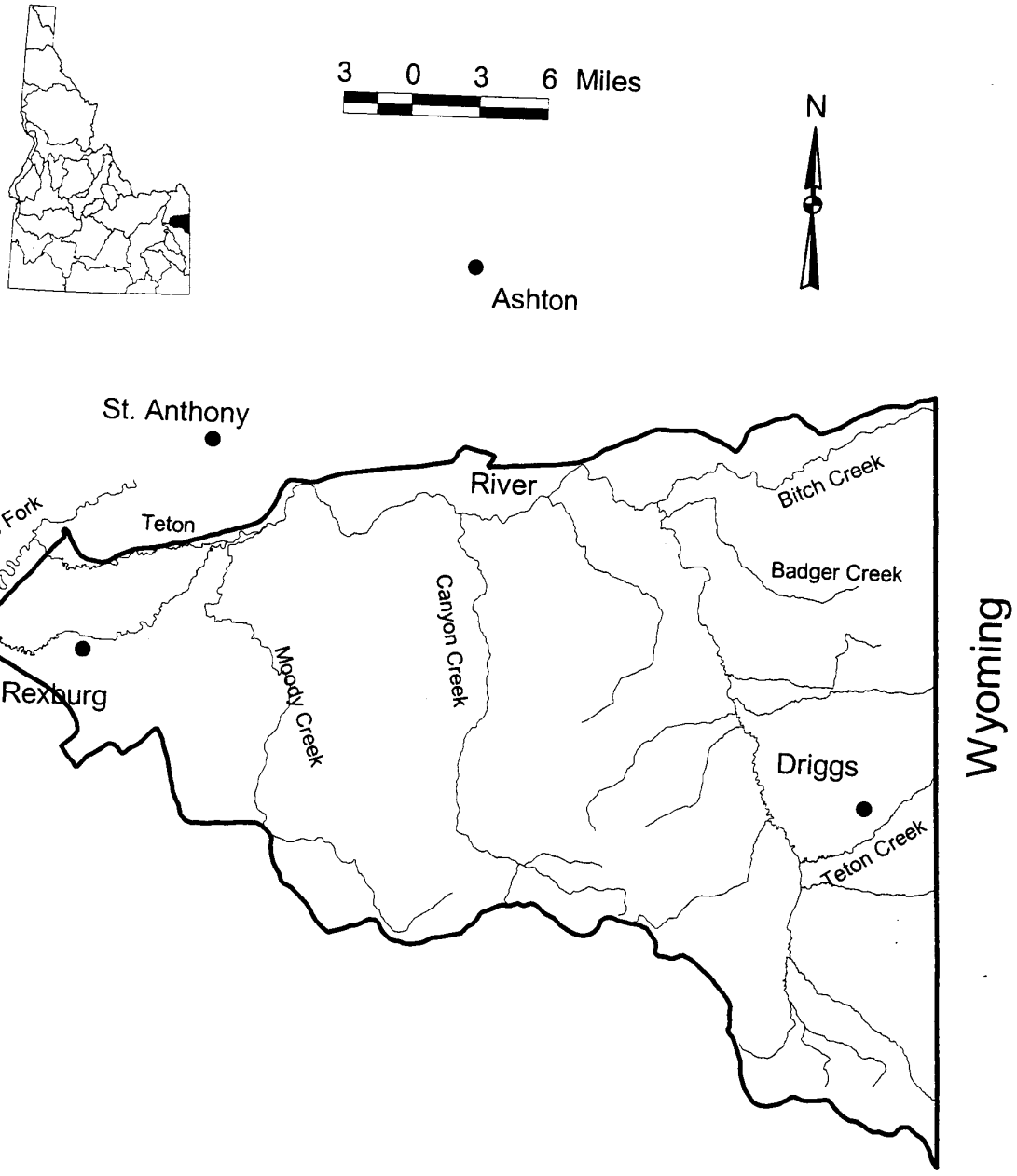
Teton River Drainage



30. TETON RIVER DRAINAGE

A. Overview

The Teton River originates on the west slope of the Teton Mountains and drains 890 square miles to its confluence with the Henrys Fork near Rexburg. Prior to the construction and collapse of the Teton Dam in 1976, the river supported a trout fishery with a 1974 and 1975 overall catch rate of 1.34 and 1.31 fish/hour. Cutthroat trout were in the highest concentration below the dam (57%) followed by the canyon (31%) and upper valley (22%). Wild rainbow trout, hybrid cutthroat/rainbow trout, brook trout and whitefish are also present.

The Teton River Fishery Enhancement Program began in 1988 to improve fishing by restoring habitat lost by the flood and by gradual, cumulative changes from land use practices. Objectives are to: (1) rehabilitate habitat; (2) increase overall catch rate to 1.5 fish/hour; (3) increase the average size in the catch to 14 inches; and (4) increase angler access.

Since the implementation of the program, several activities are ongoing to accomplish these objectives. Cooperative fencing, pasture management, and livestock non-use agreements with landowners are being used to protect and improve riparian habitat in tributaries and river sections. Re-vegetation and tree revetments will speed recovery and reduce sediment. Fish passage problems at culverts and canal diversions are being resolved. In-stream flow negotiations are being pursued.

Beginning in 1990, all cutthroat trout between 8 and 16 inches have been protected under the Upper Snake Region cutthroat trout slot limit. In 1988 prior to the regulation, 93% of the cutthroat trout harvested in the Teton River were within this window, and 51% of all cutthroat trout caught were harvested. In 1994, after the regulation, only 4% of all cutthroat trout caught were harvested. The restrictive regional cutthroat trout harvest rule has been successful in providing more and larger wild cutthroat trout to anglers, and in 2000 the rule was modified to protect all cutthroat trout under 16 inches. The July 1 season opener was established to protect spawning cutthroat trout in Fox and Trail creeks. In addition to Teton Creek, a July 1 season opener was established to protect spawning cutthroat trout in Fox and Trail creeks. Annual cutthroat trout fingerling stocking in excess of 1,000,000 fish in the mid-1980s was reduced to 150,000 in the late 1980s. Fingerling plants were discontinued in 1992 due to poor returns and increasing numbers of wild fish. The Department will work with local conservation groups to evaluate the benefits of experimental supplementation of fluvial Snake River Yellowstone cutthroat trout produced by Jackson National Fish Hatchery.

Catchable rainbow trout were stocked in the Teton Valley reach at about 7,500 per year from 1990 to 1994. These fish returned to the creel at 47% in 1994 (an increase from 36% in 1988), and the remaining 53% were estimated to have been caught and released. However, about 80% of the estimated total catch in 1994 was wild trout. The catchable rainbow trout allocation has been transferred to the Trail Creek Pond to provide an easily accessible year-round fishery. Catchable rainbow trout stocked below the Teton Dam returned at only 3% in 1988 and the program was discontinued the next year.

Although exotic wild rainbow trout and hybrid trout provided a significant component of the catch throughout the Teton River drainage (26% in 1988 and 41% in 1994), they pose a threat to the genetic integrity and long-term viability of native cutthroat trout populations. A genetic analysis has been conducted by the University of Idaho Hagerman laboratory on the South Fork Snake River trout population. Using two nuclear DNA markers to examine tissue samples from 65 Yellowstone cutthroat trout, rainbow trout, and hybrid trout sampled in 1998 and 1999, the population introgression level is estimated to be 21%. The analysis failed to detect rainbow trout alleles in 75% of the 65 trout examined. Additional sampling and analysis will continue. Harvest of exotic rainbow trout, hybrid, and brook trout will be encouraged through the general six fish and bonus brook trout limits. Stocking of Snake River Yellowstone cutthroat trout or sterile rainbow trout will be employed as necessary to meet management objectives. Monitoring of exotic trout populations will continue and additional control measures may be used if warranted.

Whirling disease was first detected in the Teton Valley reach in 1995. Additional research was initiated in 1997 to assess the potential impacts to wild salmonid populations. The investigation included sentinel exposures of hatchery trout fry, wild trout fry monitoring and population estimates in Teton and Fox creeks. Results showed high infection rates for both hatchery and wild rainbow trout and cutthroat trout. Despite increased riparian habitat protection since 1988, restrictive harvest regulations since 1990 and above normal snowpack since 1994, declines in all trout species have been documented in the river and its tributaries. The principal factor is suspected to be whirling disease, although Yellowstone cutthroat trout in Teton Valley show higher survival rates than rainbow trout or brook trout in natural conditions.

Habitat protection and enhancement, improved fish access to spawning and rearing habitat, and continued regulation of cutthroat trout harvest to protect them through at least one spawning season will increase their numbers, size, and catch rates. The Department will continue to monitor the success of the management program in conserving the native cutthroat trout resource and meeting public angling expectations.

B. Objectives and Programs

1. Objective: Preserve genetic integrity and population viability of wild native cutthroat trout.

   Program: Do not stock or allow stocking of streams, lakes or ponds with other species of fish that would interbreed or compete with cutthroat trout.

   Program: Where habitat conditions have been restored and depleted populations warrant, restock streams with cutthroat trout by collecting fish or eggs from adjacent areas.

   Program: Work to obtain special consideration, protection, and improvement of critical cutthroat trout habitat in land use decisions.

   Program: Protect cutthroat trout through at least one spawning season with late openers on important tributaries, minimum size limits, and reduced bag limits.

   Program: Continue to monitor genetic status of wild cutthroat trout populations.

2. Objective: Increase consumptive trout fishing opportunity for bank anglers near population centers.

Program: Acquire or lease small, highly accessible ponds to provide an intensive hatchery supported fishery. Develop handicapped facilities where feasible.

Program: Adjust rate and timing of stocking to provide 80% to 100% return to the creel.

Program: Inform anglers of hatchery supported trout fishing opportunities through maps, brochures, media coverage, and signs.

3. Objective: Monitor incidence of fish disease and minimize its threat to wild trout populations.

Program: Continue to evaluate the effects of whirling disease on wild trout populations.

Program: Educate private pond owners on the threat of whirling disease and strictly enforce fish transport regulations.

Program: Educate the public on the threat of whirling disease and methods to control its spread.

Program: Evaluate the effects of black spot disease on wild trout populations.

4. Objective: Monitor status of illegal fish releases and minimize their threat to wild trout populations.

Program: Monitor status of illegal brown trout and hatchery fish introductions.

Program: Educate the public on the threat of illegal fish releases and strictly enforce regulations.

5. Objective: Minimize impacts of land use and development on fish habitat and water quality.

Program: Work with government agencies, private landowners and developers, and interested conservation groups to make protection and enhancement of fish habitat and water quality a primary concern in land use decisions.

Program: Maintain cooperative fencing, pasture management, and livestock non-use projects with local landowners.

Program: Ensure restoration of habitat or mitigation of habitat loss whenever possible.

6. Objective: Minimize loss of juvenile fish to irrigation diversions and tributary de-watering.

   Program: Educate and negotiate with local irrigators for minimum stream flows when possible.

7. Objective: Obtain adult fish passage around or through barriers.

   Program: Identify and obtain passage around irrigation diversions in cooperation with local irrigators. Continue to operate and maintain the South Fork Teton fish ladder.

   Program: Identify barriers and obtain passage through road culverts.

   Program: Negotiate with local irrigators for minimum stream flows when possible.

8. Objective: Improve angler compliance with special regulations.

   Program: Develop informational programs to encourage compliance. Educate anglers on the need for regulations, the kinds and location of regulations, and alternative fishing opportunities. Continue to publish and distribute the Teton Valley fishing map.

   Program: Focus available enforcement to reduce poaching losses.

DRAINAGE: Teton River

Water	Miles/acres	Fishery			Management Direction
		Type	Species present	Management	
North and South Forks, mouth to Felt Dam	78/	Coldwater	Cutthroat trout Rainbow trout Whitefish	Quality General	Upper Snake cutthroat trout restricted harvest rules. Improv access in canyon, near dam, and below forks. Protect ar improve habitat and flows. Manage for cutthroat trout catc rate of 0.6 fish/hr. Improve overall catch rate to 1.0 fish/hr.
Felt Dam to Trail Creek	22/	Coldwater	Cutthroat trout Rainbow trout Brook trout Whitefish	Quality General	Upper Snake cutthroat trout restricted harvest rules. Prote and improve habitat. Improve cutthroat trout catch rate to 0. fish/hr. Improve overall catch rate to 1.0 fish/hr.
Teton, Fox, Trail, Bitch, Badger, Moody, Canyon creeks	27/	Coldwater	Cutthroat trout Rainbow trout Brook trout Whitefish	Quality General	Upper Snake cutthroat trout restricted harvest rules. Prote and improve habitat. Improve spawner access whe necessary.
All other tributaries	84/	Coldwater	Cutthroat trout Brook trout	Quality General	Upper Snake cutthroat trout restricted harvest rules. Prote and/or improve habitat.
Trail Creek Pond	/2	Coldwater	Sterile rainbow trout Cutthroat trout	General	Maintain catchable plants to provide catch rates of 2.0 fish/ and 100% return to the creel. Maintain handicapped access
Packsaddle Lake	/4	Coldwater	Cutthroat trout	General	Maintain fingerling plants every three years. Monitor catch, size on irregular basis.